THE GENESEE FARMER.

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Published by Luther Tucker.

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THE GENESEE FARMER.

SATURDAY, MAY 17, 1834.

Vernal Flowers.

[In a letter of the 1st instant.]

This fine month has been ushered in by a severe frost, preceded by weather still more wintry; so that many flowers, and among others the Crown Imperials, have much of a bleached and battered appearance. None have endured these rigors however, better than the Japan Quince, which has been but very slightly affected; and this fine plant will continue in full bloom this season for nearly one month.

Our earliest Jonquil and Crown Imperial opened on the 15th; but last year on the 18th and 19th respectively. The same difference between the two seasons, was also indicated by the Leather Wood. *Erythronium albidum* showed a difference of six days; and some other plants were ten days earlier in the present year, notwithstanding we have had such rough weather.

The double lilac colored primrose is very ornamental. The flower resembles a small rose, and one has measured an inch and a half in diameter. The stem is too weak to support it.

Caltha palustris, though a marsh plant, flowers prettily in a low situation in the garden; and *Collinsia verna* with its parti-colored blossoms of pure blue and white, is well deserving of a place. Four species of *Phlox* (*P. reptans*, *P subulata*, *P. divaricata*, and *P. setacea*) all of humble stature, contribute greatly at this season to the beauty of the border.

The Gorze (*Ulex europæus*) was in bloom on the 17th. Our winters are quite too severe for it; and when it is raised from its lowly bed, though its flowers are as bright as gold, it has rather a tattered or sullied appearance. I am apprehensive that I shall have to fill its place with a hardier plant.

Last autumn I planted *Saxifraga crassifolia* in a shady spot, and I think it has been more beautiful than usual. It also opened on the 17th.

I have heretofore observed that double flowers appear later than single flowers of the same species; and the double Peach is another exemplification of this remark. It will continue fine after every single-blossom has disappeared.

Fritillaria meleagris is a rambler, and sends its offsets about without any regard to order. In this respect it resembles our yellow *Erythronium*; and I doubt if it is much better deserving of a place.

Pulmonaria virginica is one of our fine native plants. In its broad, smooth and delicate leaves, and the clear blue of its pendant flowers, it stands without a rival.

The Atragene (*Clematis verticillaris*) is a native of this state though not of this district; and has a form and appearance peculiarly its own. I know of nothing which at this season can supply its place. It is a climbing shrub and perfectly hardy. Last year it began to bloom on the 27th and this year on the 28th, forming a slight exception to the general forwardness of the present season.

Manufacture of Silk.

We copy the following interesting article on this subject, from the *New York Farmer* for May:

From all we have seen and learned, we cannot resist the conclusion that this country will rapidly progress in the manufacture of silk until its own wants are supplied, and perhaps until it finds itself in a condition to compete with other countries to supply the markets of the world. In the northern, middle, western and southern States, extensive preparations are being made, not only for the growth of the mulberry, but for manufacturing the silk, particularly in some of the New England states. Of this progress our future pages will give an account

Messrs Gay & Bottum, of Lisbon, Ct., recently exhibited in this city their apparatus for the manufacture of this article. It was kept in active operation, and consisted of a reel for winding the silk from the cocoon, a winding frame for winding it from the hanks on to spools, or bobbins, a twisting or throwsting machine for doubling and twisting it on to other bobbins, and two looms for weaving. The whole apparatus would occupy a space of twenty feet square, and was made principally of iron, and in the most durable and finished manner. We took down a few notes, which we lay before our readers in the order they were taken.

The reel, which is on the principle of that of G. B. Smith, of Baltimore, consists of a wooden frame, and wheels of polished iron and brass. It is a very compact and simple machine, doing the work in the most perfect manner. The price of it is fifty dollars; and Mr. Gay thinks the part on which the silk is wound should be made of metal, to preserve the fibres or threads of the same tension until they become dry. This makes the thread smooth, and less liable to be fritted in the wear. If made of wood, he says the moisture of the silk will cause that part in contact with it to swell and shrink, and thus injure the thread. We should suppose, however, that glass, or thin pieces of metal fastened on the wood, would answer every purpose, and enable him to manufacture them at near one third the price.

On the supposition that the apparatus is moved with water or horse power, for which it is designed, one female will reel one pound of raw silk for weaving, and one and a half or two pounds for sowing. For a hand reel, two females are required to do this quantity. One bushel of cocoons will make one and a quarter pounds of merchantable raw silk, and two ounces of floss silk.

The diameter of the winding part of Mr. Gay's reel is not sufficiently large. The larger it is the faster can the silk be reeled. One of these reels will reel for a whole neighborhood, and enable silk growers to produce raw silk that will command from $4 to $5 50 per pound.

The silk is taken from the reel and put on the winding frame, which winds, twists, and, if necessary, doubles the thread at the same operation. One female, on the above supposition that the apparatus is moved by other power, will wind and double two pounds from thirty bobbins in a day. This is for warp—a greater quantity for filling.

The spools are taken from the winding frame and put on the twisting or throwsting machine. One female will attend 30 to 50 spindles, producing about one and a half pounds of weaving silk, and two for sewing. After this operation the silk is cleaned by boiling in soap suds about two hours—20 pounds of soap to 100 pounds of silk. It is now colored, which is done in New England principally with vegetable substances, almost entirely of the growth of this country. The silk is superior to that of foreign countries, in the durability of both color and wear. An elderly lady of Lisbon, Ct. has a piece of American silk of lead color, which has been lying about the house for more than twenty years: it is still unfaded and unchanged.

The next operation is weaving on a hand loom. A weaver, often a female, will produce per day five to six yards of thick vesting, or gros de Naples. Of thinner silks, six to ten yards can be woven. The specimens that we saw were very thick and strong, and were worth three dollars per yard.

Although silk has been manufactured in this country for more than fifty years, yet Mr. Bottum, who has given his attention to it for thirty years, informs us that there are not cocoons raised in the country sufficient to keep three hand looms in operation. If more cocoons were raised, there would be a better market, although they now command from $3 to $3 50 per bushel, of good quality. A farmer can raise one bushel for $2, if he hires all the labor. An orchard will let out for half or more of the cocoons produced. A gentleman in Hartford lets out his orchard for two thirds. One acre of the white mulberry will produce forty pounds of raw silk. Dr. Henry Holmes, of Hartford, says from fifty to a hundred pounds. Mr. Butler, of New York, calculates the new Chinese mulberry, Morus multicaulis, will produce one hundred pounds. Mr. B. has 100,000 of these plants.

When the cocoons are first finished by the worms, they are put in shallow baskets, covered with paper, and dried in an oven moderately heated. When taken from the oven the baskets should remain covered until the cocoons become cool, and then they are spread to dry, If they are not immediately spun, they should be put in cotton bags, with a little tobacco sprinkled among them to keep out moths.

Cocoons before they are wound should be sorted into three qualities: poor, or first sort, for sewing silk, will command $4 per pound; next,

of fair quality, worth $4 50; best, worth $5 to $5 50, when wound.

American raw silk thus prepared is superior to that of foreign countries, and will command a better price. Mr. Bottum has for two years past bought all American raw silk he could obtain. But on account of the scarcity of the article, he has been obliged to depend principally on imported silk to keep his weaving in operation. He depends on the females of our own country for all the operations except that of weaving; and for this cotton weavers will supply every demand. Much loss and much discouragement have been met with, by depending on foreigners. Mr. B. has used raw silk from Bengal, Canton, and Italy, and he prefers American silk, at 10 per cent. higher price. It is brighter, softer, and stronger, by 25 per cent. The Italian is next best for softness.

The whole apparatus exhibited by Messrs. Gay & Bottum is principally made of iron, finished in a superior style, and cost about $1000. The greater part of it would last for a century. They will exhibit it in New Haven, on the 15th of May, before the members of the Legislature of Connecticut. They intend also to exhibit it at the Fair of the American Institute in this city, in October next. As soon as it can conveniently be made, a reel will be exhibited at the Agricultural Warehouse, 81 Barclay street. The improvements in the machinery are the result of eighteen years of experiment and experience. Independent of the weaving part, or looms, two hands are required for the moving power. Horse or other power will be requisite in producing work in factories.

From the same paper we copy the following:

Silk from the White and the Chinese Mulberry.—From the information which we have laid before our readers in the volumes of the New York Farmer, they doubtless have become convinced that the Chinese mulberry, Morus multicaulis, has several decided advantages over the Italian white, Morus alba. The only point which remained unsettled was the relative value of the silk. On this we are now enabled to throw some light—amply sufficient, in our view, to settle the relative merits of the two species.

At our request Miss Parmentier furnished us with twenty cocoons, the worms of which had been fed on the M. multicaulis. Mr. Bottum, an experienced silk manufacturer, selected the same number from a quantity of a good quality fed on the M. alba. He reeled them with his well constructed reel, keeping up the thread as near as possible to fifteen fibres. The cocoons from the M. multicaulis, being thicker, made the longest thread. We repeatedly tried the strength of the two threads, and found in every instance that the M. multicaulis would raise 4½ to 4¾ ounces, while that from the M. alba would seldom go as high as 4¼. As it respects brightness and gloss, and every other requisite in good silk, if any difference, it was in favor of the former. On the supposition that the superiority of the cocoons from the Chinese mulberry is owing to the care with which Miss P. fed and reared her worms, we are on the safe side when we consider them to make silk fully equal to the others. The numerous advantages, then, of the trees themselves, will render it highly expedient, if not indispensable, to cultivate them.

For the Genesee Farmer.

Harvesting Machine.

Since the seven plenteous years in Egypt, till the last half century, no improvement, or even attempt at improvement, has been made in the labor of the harvest.

The sickle has been in use more than 3000, probably more than 4000 years, and has undergone only one modification worthy of notice in all that time.

The Hainault scythe, (Dutchman's scight) the south of England bowed scythe, and the cradle scythe, much used in our own country, are far from supplanting the sickle, or even being good substitutes for it in heavy grain. We have long and often said, when sweating under the fatigue of the cradle or the sickle, can no human ingenuity contrive an instrument, which will lessen the fatigue and the waste of the harvest.

In England some attempts were made, at the close of the last century, and since the commencement of the present, but without success. Mr. Boyer made an ingenious apparatus to imitate the motion, and do the work of the bowed scythe, but though it cut well yet it made wretched waste.

Mr. Plucknet and Mr. Smith constructed machines, but to avoid the evils of Mr. Boyer's machine, they encumbered theirs with apparatus to such an extent as to overdo the whole matter, and their machines were so liable to get out of order, and so difficult to manage, as to prevent their being brought into use.

Much was hoped afterwards from the ingenuity of Dr. Bell, of Manchester; but his machine, like the others, was too complex, and the sickle to this day has been the principal dependence in the harvest.

Mr. Hussey's machine, which you noticed last autumn, (vol. 3, p. 240,) I trust will prove a really valuable acquisition to the farmer. It is plain, simple, light, and in a fair field, I think is in no danger of getting out of tune.

Mr. H.'s machine works in an entirely different mode from any other in principle, and as the mode is, so far as I am aware, unlike that of any other cutting instrument in any occupation, I cannot give a correct idea, unless by a plate, and will not attempt it.

Mr. H. has left his machine with Mr. Ira Holmes of this village, where it can be seen. Some fields cleared from rubbish and stones for the purpose in this neighborhood, will afford a fair opportunity for a trial in the ensuing season. It is, I understand, only intended to bring the machine to a fair test, to satisfy an unbelieving race, this season, as lands on which it is to be used ought to be rolled. More of this hereafter, when the machine shall have been tried.

Yours, &c. W. C. DWIGHT.

Moscow, Livingston co., May 12, 1834.

Horticultural Meeting.—The Domestic Horticultural Society of the Western part of the state of New York, will hold their summer meeting at Blossom's Hotel in Canandaigua, on Friday the 27th of June next, when there will be awarded, 8 Premiums on Fruits—20 on Culinary Vegetables—and 7 on Flowers. The committee of arrangements consists of Messrs. John Greig, Francis Granger, Wm. Blossom, M. H. Sibley, and Alexander Duncan.

For the Genesee Farmer.

Red Root.

The alarm has been repeatedly sounded, that the Canada thistle was rapidly spreading in Western New York, and that unless active measures were taken to arrest its progress, it would overspread the country. It is indeed a formidable foe, and there ought to be an united exertion to expel it from the land. But although formidable, I consider it not the greatest enemy in the shape of weeds that we have to encounter. In strong wheat soils the red root (or pigeon weed as it is called in Cayuga) is spreading to an alarming degree. It blossoms early, and produces an abundance of seeds in 5 mo. (May,) and unless farmers pull it from their wheat fields before it seeds, many fields in this vicinity will be hardly worth tilling for wheat. My being called from home at this season, two years in succession, has prevented that attention to it which was necessary, and the consequence has been, a great increase of it on my farm. In no case is the adage more true, than in relation to the destruction of this weed, that a stitch in time saves nine.

An article from the pen of Levi Lacy, at page 365 of the 3d vol. of the Farmer, is the only one I have seen on the subject. The method proposed by the writer to extirpate red root, may be the best, where it is found in such abundance that pulling it would be too great an undertaking; but it has these objections, that the fields are thrown out of their regular course, and unless the soil is strong, taking two summer crops in succession must prove injurious.

If any of the correspondents of the Farmer are acquainted with a better method of destroying this enemy, than the one alluded to, he will render a service to the community by communicating it.

Ontario.

Linnæan Botanic Garden, May 10, 1834.

Mr. L. Tucker—I perceive brother Buel hints in your paper of May 3, that myself and brother Fleet of the N. Y. Farmer, are in error in applying the term "flesh colored clover" to the *Trifolium incarnatum*. Quere. What is the import of "*incarnatum?*" Loudon's Hortus Britannicus, page 298, says "flesh colored." This European plant consequently came to our shores with an European title. Deeming, however, from an actual inspection of its flowers, that they might with more justice be termed *crimson*, it was announced in our Catalogues distributed the last autumn, as the "Crimson Trefoil, or T. incarnatum," and some flowers just plucked confirm the application.

* * * * *

Yours, most respectfully,

WM. ROBERT PRINCE.

P. S. T. incarnatum sown last August in a situation rather dry and fully exposed, is now 10 to 12 inches in hight, and has commenced flowering; the growth much stronger and foliage far larger than the Yellow Trefoil, which it exceeds in hight by four inches. It also exceeds the White Dutch Clover in burthen by more than 100 per cent. These three species are growing side by side.

☞ We thank our friend at Stamford, (U. C.) for his suggestions, and shall be highly gratified to receive from him the plan of the machine to which he alludes.

For the Genesee Farmer.

On the Proper Depth for Ploughing.

One reading the remarks on "the culture of Indian Corn" at page 135, I was a little surprised that the writer should have made no more distinction between a loose sandy subsoil which admits the moisture freely to rise through it, and subsoils of heavy loam which approach to the nature of *hard-pan*, and through which the moisture must rise in very diminished quantity. On many farms in the western parts of this State, small beds of sand are deposited in fields which chiefly consist of heavy loam; and when ploughed, these spots are found to be moist while the surrounding soil is apparently dry. Now it appears to me that though a greater depth of loose soil than three or four inches may not be necessary for the roots of the corn to spread through, yet over a hard subsoil, a greater depth is wanted to serve as *a reservoir* for moisture. The use of such a reservoir is as follows: In times of drouth, as the surface dries, the moisture rises from below to supply the waste, in the same manner and on the same principle that water rises up through *a pile* of dry sand, or through a lump of sugar. Some years ago, I had a spot in one of my fields which in fair weather became drier than the rest of the enclosure, and which was rendered conspicuous by a difference of color. On digging down to the depth of about two feet, we found a flat rock which intercepted the moisture from below, and which consequently caused the earth more suddenly to become dry.

I agree with that able and experienced writer, however, that for Indian corn the inert subsoil ought not to be turned up; but when the true soil is deep enough, I conceive it will be better to have the surface of the sod buried more than three or four inches, when it is underlaid by a hard subsoil; for independent of the greater supply of moisture, there will be less danger of its being disturbed by the plough; a better opportunity for cultivation afforded; and a much better chance to smother the grass below. A PLOUGHMAN.

For the Genesee Farmer.

Chickweed.

I may not be able to impart the information wanted by "Ontario," but I am willing to make a remark or two. It is generally admitted that some plants are more exhausting to the soil than others; and in considering this subject there are two points of view in which it should be examined. The *first* is the quantity of nutriment supposed to be abstracted from the soil by the plants; and the *second* is the shade or protection afforded by the leaves from the burning heat of the sun in summer. Some farmers have said that if they could cover up the open space in their fields which occur between their crops, *with boards*, they would want no other manure. Now if this opinion be adopted, it may follow that although the chickweed derives some nourishment from the soil, yet its leaves and stems, acting in lieu of *the boards*, may completely counterbalance that loss. CAYUGA.

MR. L. TUCKER—In the Genesee Farmer, vol. 3, page 396, the word *not* is used instead of the word *only*—and in vol. 4, page 141, the word *glass* is used instead of *chalk*. These errors should be noted, to make the subjects correctly understood. R. M. W.

The Snow Storm of the 14th.

The unusual mildness of the month of April had but poorly prepared us for *mid-winter* in May; yet we remain living witnesses of fine weather after experiencing one of the most untimely snow storms this region has ever known. During the entire month thus far fires have been indispensable, although the weather was tolerably pleasant and comfortable up to the 12th, when the wind commenced blowing strong from the northwest and north, which, by the 13th at sun rise, had reduced the temperature below the freezing point, after a very cold night.

The mercury during the 13th, did not rise much above 40 degrees, wind north and excessively chilly; and on the morning of the 14th, the sky serene as in autumn, with a west wind, thermometer at 10 A. M. 50 degrees, barometer 29.40, there was no very fearful forebodings of inauspicious seasons. Gardeners were all in requisition, and busily engaged in depositing seed up to the very time the storm commenced, which was about 12 o'clock, and from the northeast, with a strong wind.

Snow fell very fast during the most of the afternoon, and measured in many places 4 inches. The trees with foliage half developed, were entirely shrouded, and the gloom that every where pervaded was irrepressible. At 10 o'clock in the evening the temperature was 6 degrees below the freezing point, the snowing had ceased, and the great work of destruction by frost was vigorously progressing.

The wide spread ruin observable on the 15th, when the weather was again fair, might easily be read in the prolonged visages of hundreds of our citizen gardeners, whose leisure hours are agreeably disposed in the culture of all the finest fruits which the hitherto mild climate of Genesee has perfected.

In one garden among thirty varieties of grapes as well native as foreign, not a bud unscathed could be found. Apricots, peaches, plums, cherries, nectarines and pears, are indiscriminately and entirely blighted, even on wall trees. Of apples we cannot speak definitely, but a gentleman from Ontario county thinks them greatly injured if not all destroyed. Apricots had attained the size of full grown cherries, and now hang on wilted stems evidently past the blue stage. Currants and gooseberries, which are exceedingly patient of frost, have paid respectful deference to this appalling visitation, and their pendulous racemes, as though in full bearing perfection, denote evidently a yielding to the force of circumstances.

Frost and snow in May is not very unusual, and the disastrous consequences this season must be attributed to the forward state of vegetation at the time it occurred, and the severity in this case, which we believe to be greater than has been known for many years.

Nearly the entire month of April was propitious to the early putting forth of fruits and flowers; the temperature of the ground on the 15th, deduced from that of springs, was 45 degrees, or 3 degrees warmer than for three years previous at the same date.

Yesterday, May 15th, we found the temperature of spring water 45 degrees, the same as in April four weeks previous. May 15th, 1833, it was 50 degrees, or 5 degrees warmer than at present.

To-day, Friday 16th, the air is balmy and exhilerating, temperature at 2 P. M. 60 degrees, pressure 29.90, and every rational prospect of its perpetuity.

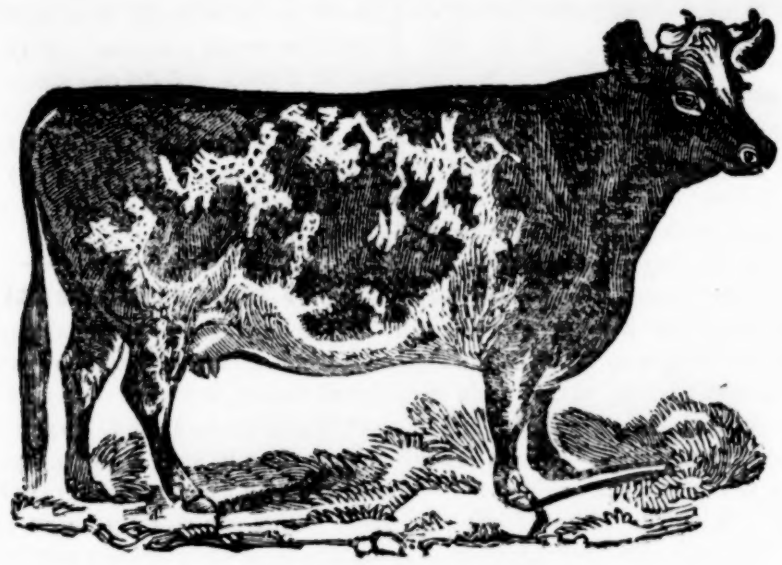
Labor is Honorable.

The following paragraph, extracted from the message of Governor Davis to the legislature of Massachusetts, is highly creditable to its author:—"While we continue to respect labor—while we look upon it, as it is, the great element that imparts to our country a growth which errors in public policy can scarcely check, and to our institutions their overpowering strength; while we hold it to be meritorious and honorable, instead of servile; while we cling to the purity and simplicity of life, which belongs to this condition, instead of degenerating into the follies, the vanity and false hopes which overgrown wealth often begets; while we pursue a policy that will give to this labor the most ample scope and encouragement in all its various occupations, we shall have little occasion to entertain apprehension for our free institutions, if we also continue to provide liberally for the culture and improvement of the mind."

Curtis' Turnep Drill.

This instrument, invented by James Curtis of this town, and a description of which we promised a week or two ago, is made in the following manner: It is in fact a wheelbarrow, with the circumference or periphery of the wheel mitred or bevelled on each side to an edge. On one side of the wheel is a circular box say eight inches in diameter. The center of this box coincides with the center of the wheel, and the shaft passes through it in its passage through the wheel. In the side of the circular box is a hole in which the seed is put, and which is stopped by a cork. The circumference of this box is perforated with small holes at regular distances, out of which a seed or two drops as the wheel revolves. In order to conduct the seed to its proper place, a gutter is fastened to the main frame work of the barrow. It runs along under the circular box, one side touching and rubbing slightly the main wheel, until it comes to the edge or circumference on the back side, it then crooks round so the end of the spout is directly over the drill or rut which this wheel has made, and the seed drops into it. A rake, and roller, if you please to add one, follows after and covers it. The wheel is pushed forward as you push a wheelbarrow, and a little experience or practice will enable you to make straight and equidistant rows. On this principle, a common wheelbarrow may be converted into a drill by having the wheel so fixed that it may be taken out and a circular box slipped over the axle tightly, and screwed on to the wheel.—*Maine Farmer.*

DALE'S HYBRID TURNEP—SPLENDID CROP.—We have repeatedly called attention to Dale's Hybrid, a turnep which combines in a great degree the qualities of the globe and ruta baga, and are glad to learn that its culture is gradually extending. In proof of this, we make the following quotation from a letter just received from Sanquhar:—"A gentleman in this neighborhood has a crop of Dale's Hybrid, which, from the experiments already made, will yield a return of not less than twenty-five tons per acre. Nothing equaling or approaching to this has been known in this country. The bulbs are at once large and solid; and two of them have been sent to Messrs. P. Lawton & Son, to be shown as an agricultural curiosity."—*Dumfries (Scotland) Courier.*



AYRSHIRE COW.

[*For Description, see page* 148.]

For the Genesee Farmer.

Cattle--No. IX.

POLLED OR HORNLESS BREED.

To an ordinary observer, *beauty*, as applied to an ox or a cow, would seem almost paradoxical, and yet there are many persons in whom certain peculiarities of form and figure, in these animals, produce the most pleasurable sensations. If *beauty* is a mere matter of taste, depending upon education and association for its definitive attributes, there can be no more reason why an *horn less ox* should not appear beautiful and symetrical to a Scotch lowlander, than that a fat and overgrown maiden, should seem the very acme of beauty to an effeminate Mussulman. To us indeed, an ox or a cow without an horn, seems like a tree without its top, divested of that peculiar characteristic which renders it pleasing and acceptable to the sight; and yet an hornless animal may be, and often is, as useful and as valuable as the more perfect Devon or Durham. But after all, the world is governed more or less by its ideas of beauty; and as Ulmus has justly observed, "beauty is a quality that is always highly estimated, and *well paid for*." I am free to acknowledge, that to my unpracticed eye, an hornless ox presents but few attractions, however high it may be estimated in the scale of usefulness or profit.

The *Polled* or *Hornless breed*, seems to have been indigenous to the ancient province of Galloway, on the western shores of the lowlands of Scotland. Hence the term "Galloways," as frequently applied to the whole Hornless breed. As I have heretofore remarked, their history is traced to the remotest periods of Scotch tradition. Until about the middle of the last century, the Middle Horns, or Kyloes, were the prevailing breed throughout this region, and yet Hornless animals, either the remnant of the *native breed*, or an accidental variety, were scattered here and there throughout the district. Goldsmith supposed the Polled cattle to have been derived originally from the kingdom of Poland, but there is no other evidence of this than his own declaration; while on the contrary, we have every reason to believe they originated, as just described, in the lowlands of Scotland.

But be their origin what it may, they were early discovered to possess intrinsic qualities of a superior order, and soon became favorites not only with the Scottish graziers, but with English farmers. They fattened with great ease and economy, attained a large size, and their flesh presented that rich and marbled aspect which is so gratifying to the sight and the taste of an epicure. With these characteristics, they soon superseded the native Middle Horns, and had it not been for the sudden appearance and extension of their neighbors the Ayrshires, with all these requisites and that of milking superadded, the Galloways would probably have obtained a decided ascendancy throughout the lowlands.

About the year 1786, the Earl of Selkirk commenced improving the agriculture of Galloway, and his attention was early drawn to this breed of cattle. To him and his sons and their many associates are the Galloways principally indebted for their present improvement. As a breed, Mr. Culley describes them, with the exception of the horns, as resembling very nearly the Long Horns, both in color, shape and fattening, though somewhat less in weight. "Their hides seem to be a medium between the Long and Short Horns, and they so fatten upon the most valuable parts, that few cattle sell at a higher price in the Smithfield market."

For a particular description of the characteristic points of the Galloway cattle, I would refer the reader to the 5th number of the present volume of the Farmer, page 35. It will there be seen, that the breadth and straightness of the back, the roundness of the rib and barrel, the fullness and capacity of the chest, the smallness of the bone and other offal, enable them to compete with almost any breed, simply as graziers. But as milkers they bear no comparison with the Ayrshires or Durhams, and yet it is a singular fact, that the present *improved Short Horns* originated from a cross between the old Teeswaters and a Galloway cow. Was it not for their prevailing color, which is black, and their deficiency of horns, the Galloways would probably have taken a more elevated station as an *improved breed;* and even as it is, with these defects, they are in many districts held in the highest estimation. As a breed, they have one or two other qualities which are peculiar. They seem wholly incapable of improvement by any foreign cross, though they have imparted to other breeds some essential advantages. Another peculiarity is, the uniform character and excellence of the cattle throughout a given district. While other cattle differ in size and quality, a Galloway bullock selected at haphazzard will prove a fair specimen of the whole breed in that district.

Beside the Galloways, there are several other polled breeds, which were originally derived from the same source, though essentially different in many particulars. The Angus, the Norfolk, and the Suffolk breeds, are all of the Hornless variety, each having some qualities peculiar to itself.

The *Angus cattle* are intrinsically the same as the Galloways, though a good judge would readily perceive that they are larger, longer in the leg, thinner in the shoulder, and flatter in the side, and in general, their skins are thinner, smoother, and the hair much shorter. Their origin is so remote that no account of their introduction to this country can now be obtained. But it is evident that here as well as elsewhere, climate and management have had a powerful influence upon the qualities of the cattle. Although Angushire is much farther north, their size has been increased, their color changed, and their value so enhanced, that they are rapidly spreading throughout the district, and bid fair to supplant the horned cattle for the purposes of grazing.

One of the most spirited and successful breeders of the Angus cattle, is Mr. Watson of Kiellor, from whom was derived the *Kiellor breed*. He has gained on account of them more than one hundred prizes, besides many pieces of plate; and in 1831, he sold a bull for one hundred guineas, and a lot of heifer calves at forty pounds per head. As milkers, they are rather superior to the Galloways, but since their improvement in fattening, even this quality has materially diminished. Some curious facts have been observed in the breeding of *Angus doddies*. It is well attested, that in one instance, a cow chanced to come *into season* while pasturing near a field containing *horned pied cattle*. An ox, white with black spots and *horned*, jumped the fence, and went with the cow until she was brought home to bull; no other horned cattle had any access to the cow, and yet the produce of the following spring was a black and white calf *with horns*. Many other experiments with similar results are well attested, showing that even in these latter days, Jacob's plan of producing ring streaked, speckled and spotted cattle, may be practiced with equal success.

The counties of Norfolk and Suffolk are on the extreme eastern shores of England. From a very early period, the Galloway cattle were prepared for the London market on the pastures of Norfolk and Suffolk, and nearly one half of the beasts which supply that market come from these counties. Thus introduced, some of the Galloways were retained, and became naturalized to the soil and climate. In Norfolk they have enlarged, but not materially improved, though their color is changed from a black to red or pied. They are extensively reared, however, on account of their fattening qualities, for the London market.

In Suffolk, also, the Galloways were the progenitors of the present breed of Polled cattle. The *Suffolk dun* was celebrated in every part of

England on account of her extraordinary milking qualities; but this color is now discarded. The prevailing and most esteemed colors at the present time are red, red and white, brindled, and a yellowish cream color. The Suffolks are larger even than the Norfolks, and fatten with more ease and economy, and reach greater weights; but aside from their excellency as graziers, they are the only Hornless variety which has gained any reputation as *milkers*. The admirers of the Suffolk cow do not admit her inferiority to the very best of the Short Horns, especially when the *quality* of the milk is taken into account. Her milk is exceedingly rich, and the quantity averages from 16 to 32 quarts per day. Mr. Moubray states, that for a private family, no breed in England combines so many advantages. "They excel both in quantity and quality of milk; they feed well after they become barren; they are small sized, and *polled* or hornless; the last a great convenience." There are few *Short Horns*, although superior in size, and consuming double the quantity of food, that will yield a larger quantity of milk, to say nothing of the quality.

But there is one important difference between the "improved Short Horns" and the Suffolks. The former is almost always fat, while the latter, if she continues a milker, is invariably lean and ill looking. Where economy and profit are alone sought for, there are perhaps few cows more desirable than the Suffolk.

"Whence she obtained the faculty of yielding so much milk, is a question that no one has yet been able to solve." The Galloways have it not, and the Short Horns were not introduced until long after the Suffolk duns were celebrated. Like the Devons, this breed has seemed to increase and improve without any care or attention, and in spite of themselves. How far climate and soil have produced this effect, we are not informed; but as no foreign crosses, not even the Short Horns, have produced any improvement to the breed, we may safely infer, that there is some peculiar *adaptedness* of this *particular breed* to that *particular soil* and *climate*. QUERCUS.

For the Genesee Farmer.

Ruta Baga and Mangel Wurtzel.

As I have cultivated these roots more or less every season for the last twenty years, I suppose a short account of my practice may be acceptable to such as are now commencing.

Three times ploughing, with a harrowing and rolling after each, puts the ground in complete order to receive the seed of the ruta baga, which should be sown immediately after the last ploughing—the longer time the ground lays between each ploughing the better, so that the grass and weeds don't grow large, say not less than a month.

The time of sowing may vary according to circumstances and convenience—any time from the first to the end of the seventh month (July,) will do for ruta baga in this latitude. If I wanted the roots for table use I should not think of sowing before the middle of the month—if for cattle, it might do to sow the beginning; but I may remark that most of the failures I have noticed have been in consequence of too early sowing on land not well prepared; for, though turneps do not require a very rich soil, it should be perfectly mellow, and every particle of grass or perennial weeds ought to be entirely dead before the seed is sown. Thus the hoeing and weeding is performed with far less labor than would otherwise be required, and the roots will grow quick—this they must do to be sound and well flavored.

I have usually put on about six or eight two horse loads of dung previous to the first or second ploughing, as most convenient. This, however, is not necessary if the ground is naturally rich, or has been in grass for some time.

The method of sowing in rows is the best, in my opinion. I have tried various distances for the rows from two to four feet—the former is decidedly too close, and the latter distance may be thought too wide; but I have found the bulk of crop greater on four feet space than on two feet—at any rate I think it is a positive loss of labor to sow closer than three feet. This leaves room for a cultivator to pass between the rows. The plants should be thinned so as to leave only one in a foot; it is important that this should be done as soon as the plants are large enough to resist the attacks of the turnep fly. The crop will be much diminished if this is not attended to, especially when vegetation is rapid. One pound of seed is amply sufficient for an acre if sown in rows—if broad cast, the same or rather less will suffice, on account of the increased difficulty of hoeing and thinning.

The common English turnep I consider but a very poor root to cultivate for cattle; but if managed as above directed for ruta baga, except to sow the seed two or three weeks later, very heavy crops could be raised; but I think mangel wurtzel is the most valuable root for cattle. It is a trifle more expensive to raise it—requires to be sown about a month earlier than ruta baga—is not so easily preserved through the winter, and requires rather a richer soil. On the other hand, it thrives best on soils too heavy for the turnep—the bulk of crop is greater—it can be sown to advantage after once ploughing, and is never eaten by insects as turneps are. Thus being a very certain crop, it received the name of root of scarcity, meaning, I suppose, that it never failed in times of general scarcity. Cattle, sheep and hogs, prefer it to any other root that I have ever seen after they become used to it. Two pounds of seed will suffice for an acre, in rows three or four feet apart. I have always been sensible of a loss of time and labor, when I have planted this crop closer than four feet by fifteen inches from one plant to another. It is a gross feeder, and I believe no soil can be too rich for it, but it will amply repay the labor bestowed on it. I have raised them weighing twenty-five pounds each, and I believe there was one of these roots exhibited in London weighing 42 pounds.

Lastly, I may just say how I proceed with the work of sowing the seed, which, for each kind, does not vary much—having no drilling machine, I get a piece of plank or slab six feet long, more or less, according to the distance I intend to have the rows—saw out three blunt teeth, one at each end and one in the middle—put a long handle in the center, and draw this thing over the ground cross ways of the last ploughing, letting one outside tooth go in the last marked row, thus making two rows every time. To expedite the sowing, I moisten the seed a little, and add a little lime or some white substance. This makes it easy to see how thick I sow it, and enables me by going at a quick step, to put in several acres in a day if required. J. S.

Owasco, 5 mo. 7, 1834.

For the Genesee Farmer.

The Barberry Bush.

B. H. of Saratoga Springs has given the most particular account that I have ever met with, of the supposed effects of the Barberry in blighting wheat; and though, if I had been on the ground, I might have drawn a very different conclusion, yet so far as respects its particularity, his communication is satisfactory. Writers on that side of the question, have heretofore been extremely vague in their statements. Previous to my reading his article, I had not learned how far the influence of this northern Bohon Upas was believed to extend; nor that it was deemed quite so baleful on rye and oats.

The circumstance that the holders of this notion, have not been able to agree among themselves about the cause of such marvellous effects, is sufficient to excite some suspicion of its correctness, in unprejudiced minds; and that suspicion will be increased, when it is ascertained that these reasons are untenable. For instance, it has been said that the flowers of the Barberry attract flies, and that the grain suffers in consequence. If it attracts them from the grain, then so much the better, provided the flies were injurious. The Barberry cannot actually increase their number. But I will ask, Are flies which are fond of Barberry flowers, injurious to grain? Not a particle of evidence of the kind, has been produced; and what adds to the imbecility of this reason, is, the Barberry is several weeks out of flower, before either wheat or rye comes into blossom.

Another reason has been given which is not less remarkably lame. The *rust* on wheat is a small species of fungus called *Puccinia graminis;* the *rust* on the leaves of the Barberry, is *another*, known by the name of *Æcidium berberides;* and in the absence of all proof of any connection between them, we have been required by some advocate of that notion, to believe that the latter generated the former—an absurdity quite equal to the transmutation of wheat into chess.

Others have suggested that *Puccinia graminis* grows, not on the leaves of the Barberry, but on its bark,—passing through several generations on *dry food* before it goes out to pasture in the grain fields. Some elaborate works on the Fungi however, which describe every known species, and the vegetables on which they have been discovered, are entirely silent on this subject. Neither does *Gray* nor *Lindley* countenance the idea that any species of *Puccinia*, grows on the Barberry.

It is not less worthy of remark that many persons, both in America and in Europe, have not been able to discover any such pernicious effects from that shrub. The following extracts are designed to prove this, by showing a discrepancy of opinion among observers. *Gray*, with his usual brevity, says, "It is *supposed* by *some* to cause *wheat* growing near it, to become mildewed; but this is denied by *others.*" In *Loudon's* Encyclopædia of Plants it is also said, "Many highly respectable authorities in Britain, on the

continent [of Europe,] and in America, are *in favor of*, and *against* this opinion."

Dr. *Bigelow*, in his Florula, remarks, "It is a commonly received opinion, both here and in Europe, that the Barberry is injurious to cultivated grain. Wheat, rye, &c. growing in its neighborhood are *said* to be blighted; but some distinguished philosophical agriculturists, among whom are Duhamel and Broussonet, have *assured* us that the opinion is *without foundation*."

As an off-set to the statements of B. H. I will take the liberty to offer the following cases:

The first is from a writer (H. C.) in the New York Farmer, published about two years ago: "For the two last years, I have raised spring wheat *in the very near vicinity* of Barberry bushes *without any perceptible injury*. The year before the last the crop was very good, being at the rate of twenty-five bushels to the acre; the present year much lighter, but this was the case with English grain among us universally. In neither case was there any appearance of blast."

The following extracts, were written some months ago by a friend of mine, who resides about twenty miles north of Philadelphia: "The late *Seneca Lukens* had a fine Barberry bush which grew *at the side* of his wheat-field without any sensible injury to the crops. I have had a thrifty bush of the same kind for several years; and have not experienced any bad effects from it on my crops, although it is *not twenty feet* from the edge of the wheat-field. Many of the old gardens between this place and Philadelphia, have been ornamented for a long series of years with the Barberry. I have made particular inquiry on the subject of its blighting wheat, for several years past, without being able to hear of a single fact in its favor; and I now believe it to be an absurdity

"Some persons indeed, who ornamented their grounds with the Barberry, have had their enclosures entered in the night; and their bushes destroyed by ignorant and prejudiced farmers, for *fear* their crops of wheat would be blasted; as they had been told that such a disaster would befall them, unless the enchanter was expelled."

Some readers of this paper may recollect that about a year ago, I published a notice of an excellent crop of wheat, raised by my friend *Humphrey Howland* of this town; and that a very large Barberry bush stood *within three rods* of the edge of that lot.

It is truly astonishing that these shrubs prove so innocent in some parts of the country when they are deemed so deleterious in other parts; and I am led to the conclusion that this difference must be ascribed to the medium through which the observations have been made. D. T.

P. S. I would respectfully suggest to B. H. that the Barberry has run into several *varieties*; and that the fruit of some is much better adapted to culinary purposes than that of others. His bush appears to have been an inferior variety.

POTATOES.—Try it—Those who are fond of baked or roasted potatoes, will be gratified by trying the following method:

Place them clean in the bottom of a bake pan or kettle, dispensing with the cover—hang them over the fire and shovel the coals on to them. It will be as quick and as cheap as any other method of cooking them; and they are not so soggy as when baked under the cover, nor burnt as they commonly are when roasted on the hearth—and the flavor will be excellent.—*Maine Farmer.*

Science of Agriculture.

PLOUGHING.

Ploughing is justly considered the most important of Agricultural operations, as on the manner in which this is performed, depends the facility of executing all succeeding operations on the same piece of land. The manual operation of holding the plough in a proper position, and directing the horses or cattle which draw it at the same time, is only to be acquired by experience; when once attained it is perhaps one of the most agreeable and healthy of agricultural exercises, the body being kept upright, the arms and legs being brought into action, and also the eye and the mind, to keep the furrow straight, and of regular width and depth, and the voice to speak to the horses.

Three different points require particular attention in ploughing: 1st, The breadth of the slice to be cut; 2d, its depth; and 3d, the degree in which it is to be turned over;—which last circumstance depends both upon the construction of the plough particularly the mould-board, and the care of the ploughman.

The breadth and depth of the furrow-slice are regulated by judiciously placing the draught on the nozzle or bridle of the plough; setting it so as to go more or less deep, and to take more or less land or breadth of slice, according as may be desired. In general, the plough is so regulated that, if left to itself, and merely kept from falling over, it would cut a little broader and a little deeper than is required. The coulter is also placed with some inclination towards the left or land side, and the point of the sock or share has a slight tendency downwards.

The degree to which the furrow-slice turns over, is in a great measure determined by the proportion between its breadth and depth, which for general purposes, is usually as three is to two, or when the furrow is nine inches broad it ought to be six inches in depth. When the slice is cut in this proportion, it will be nearly half turned over, or recline at an angle of forty or forty-five degrees; and a field so ploughed will have its ridges longitudinally ribbed into angular drills or ridgelets. But if the slice is much broader in proportion to its depth, it will be almost completely overturned, or left nearly flat, with its original surface downwards; and each successive slice will be somewhat overlapped by that which was turned over immediately before it. And finally, when the depth materially exceeds the width, each furrow-slice will fall over on its side, leaving all the original surface bare, and only laid somewhat obliquely to the horizon.

Ploughing with the breadth and depth nearly in the proportion of three to two, is best adapted for laying up stubble land after harvest, when it is to remain during winter exposed to the mellowing influence of frost, preparatory to fallow or turneps.

The shallow furrow of considerable width, as five inches in depth by eight or nine wide, is understood to answer best for breaking up old leys, because it covers up the grass turf, and does not bury the manured soil.

Ploughing with the depth of the furrow considerably exceeding the width, is a most unprofitable and uselessly slow operation, which ought seldom or never to be adopted.

The most generally useful breadth of a furrow-slice is from eight to ten inches, and the depth, which ought to be seldom less than four inches, except in soils uncommonly thick and fertile. When it is necessary to go deeper, as for carrots and some other deep rooted plants, a trench ploughing may be given by means of a second plough following in the same furrow.

Shallow ploughing ought always to be adopted after turneps are eaten on the ground, that the manure may not be buried too deep; and also in covering lime,--especially if the ground has been pulverized by fallowing, because it naturally tends to sink in the soil. In ploughing down farm yard dung, it is commonly necessary to go rather deep, that no part of the manure may be left exposed to the atmosphere. In the first ploughing for fallow or green crops, it is advisable to work as deep as possible, and no great danger is to be apprehended, though a small portion of the sub-soil be at that time brought to the surface.

The furrow-slices are generally distributed into beds varying in breadth according to circumstances; these are called *ridges* or *lands*, and are divided from one another by gutters or open furrows. These last serve as guides to the hand and eye of the sower, to the reapers, and also for the application of manures in a regular manner. In soils of a strong or retentive nature, or which have wet close sub-soils, these furrows serve likewise as drains for carrying off the surface water, and being cleared out, after the land is sowed and harrowed, have the name of *water-furrows*.

Ridges are not only different in breadth, but are raised more or less in the middle, on different soils. On clayey retentive soils, the great point to be attended to is the discharge of superfluous water. But narrow ridges or *stitches* of from three to five feet, are not approved of in some of the best cultivated counties. In these a breadth of 15 or 18 feet, the land raised by two gatherings of the plough, is most commonly adopted for such soils; such ridges being thought more convenient for manuring, sowing, harrowing, and reaping, than narrow ones; and the water is drained off quite as effectually.

Ridges on dry porous turnep soils, may be formed much broader; and were it not for their use in directing the laborers, may be and sometimes are, dispensed with altogether. They are often 30, or 36 feet broad, which in Scotland are called *ban-win* ridges, because reaped by a band of shearers, commonly six, served by one binder. If it be wished to obliterate the intermediate furrows, this may be done by casting up a narrow ridgelet or single bout ridge, between the two broad ridges, which is afterwards levelled by the harrows.

The mode of forming ridges straight, and of uniform breadth, is as follows; let us suppose a field perfectly level, that is to be laid off into ridges of any determinable breadth. The best ploughman belonging to the farm conducts the operation, with the aid of three or more poles, shod with iron, in the following manner: The first thing is to mark off the head ridges, on which the horses turn *in* ploughing, which should in general be of an equal breadth from the bounding lines of the field, if these lines are not very crooked or irregular The next operation, assuming one straight side of the field, or a line that has been made straight, as the proper direction of the ridges, is to measure off from it with one of the poles, half the intended breadth of the ridge, if it is to be gathered, or one breadth and a half if to be ploughed flat; and then the ploughman sets up a pole as a direction for the plough to enter. On a line with this, and at some distance, he plants a second pole, and then in the same manner a third, fourth, &c. as the irregularity of the surface may render necessary, though three must always be employed,—the last of them at the end of the intended ridge, and the whole in one straight line. He then enters the plough at the first pole, keeping the line of poles exactly between the horses, and ploughs down all the poles successively; halting his horses at each, and replacing it at so many feet distant as the ridges are to be broad; so that when he reaches the end of the ridge, all his poles are again set up in a new line parallel to the first. He returns, however, along his former track, correcting any deviations, and throwing a shallow furrow on the opposite side of his former one. This mode has a decided preference over the common practice, of laying the two furrows *first* towards each other. By *first* throwing them from each other, and then reversing them, the whole ground is ploughed; and, if the first furrows are shallow, the ridge has but a slight elevation in the center. These furrows, when reversed, form the crown of the ridge, and direct the ploughmen who are to follow. The same operations are carried on until the whole field is marked out.

The direction and length of ridges are points which must evidently be regulated by the nature of the surface, and the size of the field. Short

angular ridges called *butts*, which are often necessary in a field of irregular boundaries, are always attended with a considerable loss of time, and ought to be avoided as much as possible.

In ploughing steep land, it is advisable to give the ridges an inclination towards the right hand at the top, by which, in going up the acclivity, the furrow falls more readily from the plough, and with less fatigue to the horses. Another advantage in forming ridges in a slanting direction on such land is, that the soil is not so likely to be washed down from the higher ground, as if the ridges were laid at right angles. Wherever circumstances will permit, however, the best direction is due north and south, by which the grain on both sides of the ridge enjoys nearly equal advantages from the influence of the sun.—*Enc. Britannica.*

In ploughing relatively to season, it is well known, that clayey or tenacious soils should never be ploughed when wet; and that it is almost equally improper to let them become too dry; especially if a crop is to be sown without a second ploughing. The state in which such lands should be ploughed is what is commonly indicated by the phrase, "atween the wet and the dry," —while the ground is slightly moist, mellow and less cohesive.—*Enc. Ag.*

From the Maine Farmer.

Sowing and Transplanting.

Mr. Editor: One of the principle causes of the failure of many seeds is the hardening of the surface of the ground by rains or watering, so that the young plant is unable to rise through the soil. Last spring it occurred to me that this might easily be prevented by the use of a little sand. I first covered my delicate flower seeds, &c. very slightly or not at all with the common earth of the garden then strewed fine sand upon them, about an inch deep, and watered heavily and frequently upon the sand. I found it to entirely answer my expectations. Out of forty kinds of flower seeds I had lost very many every season.

Transplanting Implements. Several complicated transplanting instruments, consisting of several pieces are described in the books, but I believe that one which I made and used last summer will be found to answer almost every purpose. It consists of a simple cylinder of tin plate equal throughout, the top edge being turned over so as not to cut the hand. They may be made of any size, but the best for ordinary purposes are about 8 or 10 inches high, and 4 or 5 in diameter. It is placed over the young plant about to be removed and pushed down a few inches into the soil nearly or quite to the bottom of the roots; it is then taken up bringing the earth and plant with it. Being then carried to the place where it is wished to set the plant, and the hole being previously made to receive it, it is set in the hole, and a few strokes from the digger on the outside loosens it and leaves the plant erect in its place, with all the earth in a circular mass about it, when the transplanter is removed. The ease and neatness with which the operation is performed is very striking. A plant may be kept in the transplanter for several days uninjured, and carried to almost any distance. I have sent to Mr. Barrett three transplanters of different sizes, which will perhaps explain themselves better than my description.

William Oakes.

Ipswich, April 8.

Rain Water.

In our country there falls rain, including melted snow, to the average depth of thirty-five inches. On a surface forty feet square, there falls yearly 34,909 wine gallons; and if all this were secured in cisterns, there would be nearly one hundred gallons for every day's consumption, or about three barrels. This water, if well preserved, would be the very purest and best for most domestic purposes. The horse and the cow prefer rain water to pump or well water; and though it would not be entirely governed by their decision, yet great respect is due to their judgment in such matters. The water of many wells is tinctured in such a way as to make it less fit for a solvent; and it does not so perfectly combine with nutritious substances to form chyle, and nourish the human system. They who live in situations where water is not easily procured from the ground, may be told that the purest water is descending around them; and if they will only be at the necessary expense to secure this gift of heaven, they may provide an abundant supply. On such reservoirs the inhabitants of Palestine placed much dependance; and it is a merciful appointment of God, that in warm countries, where the greatest supplies of water is needed, the most rain descends. We may yet find good capacious cisterns, of brick, or stone, and Roman cement, economical additions to our domestic conveniences. A cistern ten feet square and ten feet deep, would contain one hundred and eighteen hogsheads of sixty-three wine gallons each, and would secure to most families, a constant supply of water.—*Scientific Tracts and Lyceums.*

Rheumatism.—In our last paper we published a receipt for the rheumatism, which was simply this: "Take a strip of gum elastic, and tie it round the joints affected." This would not endanger life, and was well worthy the experiment. So we say. It was tried upon a gentleman of this place, who had resorted to almost every other remedy, and to his surprise had the desired effect. In fact, he was so much reduced by this disease as to lose the use of his limbs, and in making the experiment has not only been relieved of the pain and weakness so incident to its nature, but is finally gaining, and enjoying nearly the wonted strength of his system. We recommend the remedy.—*Lebanon Gaz.*

Caffers of Southern Africa.—Their color is a clear dark brown, hair black but wooly. The most prominent trait in the character of the Caffer is that of the herdsman, rather than the warrior; for he is never so happy as when engaged in something that is calculated either to increase the numbers or improve the appearance of his cattle. Such is his daily attention to these that one out of a thousand would be immediately missed. His perfect acquaintance with every little spot on the hide, turn of the horns, or other peculiarity, after having seen an animal once or twice, is indeed astonishing, and says much for his powers of observation.

The Caffer chiefs are in all cases both legislators and judges, whilst "the old men" and favorite courtiers form a kind of jury and council too. The parties appear personally, plead their own cause, and produce their witnesses and proofs. In their public harangues a man is seldom interrupted, although his speech be continued for hours together; but during this time his antagonist is all attention: when he rises to reply, every argument that has been adduced is taken up in the exact order in which it was delivered, & with as much precision as if answered at the very moment. Memory is their only note book; and although apparently put on many occasions, to the severest test, they seldom seem to labor under any material difficulty in bringing up all the details of the subject by the astonishing powers of recollection. Their language on these occasions, is generally strong and nervous, and their manner exceedingly manly and dignified. Even the children when about to reply to the most simple questions, step forward, throw back the head and extend the arm, and give their words a full, slow, and clear enunciation.—*Kay's Travels in Caffraria.*

The celebrated Road maker, M'Adam, has been knighted by the King of England.

The Plum tree is subject to a disease called canker, cancer, and by various other names, which destroys thousands. It is a kind of vegetable gangrene, if the term may be allowed, which if not timely arrested, generally proves fatal to the tree. It is a vegetable excrescence, upon the stock or limbs, at first green, and afterwards becoming black. The affected branch soon dies, and the whole tree gradually perishes. It is generally supposed to be caused by some insect, whose poison, injected into the tree, vitiates the sap. The only preventive known to prove successful, is to cut off all the diseased parts, as soon as it appears, and commit it to the fire. This plan has been adopted in the writer's garden, and in the Albany Nursery, for some years; and hardly an instance of the disease occurs in a season.—*Cultivator.*

List of Subscribers

Who have paid for the 4th volume of the Genesee Farmer—continued.

Dr. Phillips.	Cheever Newhall.
Isaac Wallace.	Samuel Burns.
Thomas Ratoon.	E. S. Walker.
Dr. Isaac Brown, 3 copies.	Ephraim Calkins.
	Amon Lanydon.

The following have paid to July 1, 1834.

A. Woodruff.	Bunn Willetts.

Whole number who have paid for Vol. 4, 270

do. who have paid to July 1, 1834, 119

The Vermont Farmer's Journal thus notices our list of payments:

Liberal Patronage.—In some sections of our country, where agricultural science is duly appreciated, there are no periodicals more liberally patronized than those devoted to this important subject.

The editor of the Genesee Farmer has recently published a list of his subscribers who have paid in advance for the fourth volume of that work, at two dollars per annum. The numer is about three hundred. One individual, Joseph Fellows Esq. advanced the cash for twenty-five numbers, ($50)—some ten, and some eight, six and four dollars each. Such patronage is worth having —such encouragement makes useful papers.

We have no doubt but a good agricultural paper put into the hands of every farmer in the county of Rutland, and read and attended to, would raise the standard of agriculture in five years twenty-five per cent.; and would be the means of increasing the products one-fourth, and perhaps with less labor.

PRICES CURRENT.

ARTICLES.	PER	*May* 16. ROCHESTER.	*May* 12. NEW-YORK.
Ashes—Pot....	100lbs.	$3,25.....	$4,12 a 0,00
—— Pearl..	.....	3,50.....	4,60 a 4,65
Beeswax, yellow	lb.	0,16 a 0,18	20 a 21
Candles, mould	.....	0,10 a 0,11	13 a 14
—— dipped.	.....	0,09 a 0,10	11 a 12
Cloverseed.....	.....	6¼.....	6 .a. 6½
Flax, American.	.....	.....	8..a. 8½
Flax seed, clean	tierce	9,00a10,00	10,50a11,00
Flour, Western.	barrel	4,50.....	4,81 a5,12
Grain, Wheat..	bushel	0,81.....	1,00 a1,03
—— Rye....	.....	0,62.....	62..a..65
—— Oats...	.....	0,25..a..27	35..a..36
—— Corn...	.....	0,44.....	70..a..00
—— Barley..	.....	0,50..a..56	70..a..71
Hemp, Americ'n	ton	.....	100 a 125
Hops, 1st sort..	lb.	.....	10..a..11
Plaster Paris...	ton	6,00 a 0,00	2,75 a0,00
Beef, Mess....	barrel	0,00 a10,00	8,75 a9,50
—— Prime....	.....	0,00 a 8,00	5,50 a 5,75
Pork, Mess....	.....	14,00a15,00	13,00a14,25
—— Prime....	.....	11,00	9,25a10,50
—— in the hog.	100lbs.	4,00.....	.....
Hog's Lard....	.....	8,00 a 9,00	6,50 a 8,50
Tallow.....	.....	7,50 a 8,00	7,00 a 7,50
Hay.....	ton	7,00 a 8,00	9,00a11,20
Apples.....	bushel	50..a.100	.....
Potatoes.....	.....	18..a..25	.....
Cheese.....	lb.	6..a...8	7½..a.09
Butter.....	.....	12..a.14	12½..a..16

For the Genesee Farmer.

"Let thy servant, I pray thee, turn back again, that I may die in mine own city, and be buried by the grave of my father and of my mother." (2 Sam. xix: 37.)

This was the request of an aged man, to whom the king of Israel made the princely offer, that he should go and dwell with him at Jerusalem and be fed from the rich bounties of his own table. To the sentiment, here disclosed, almost every one will respond, whose early lot in life has not been cast in disgraceful wretchedness.

This sentiment was deeply impressed upon my mind, some time since, while visiting one of our fine steam boats as she was about starting on her first trip for the season from Buffalo to Detroit. Crowded as she was with passengers of every complexion, clime, and condition of life, I pressed my way through the busy, anxious multitude, viewing the various countenances, and reading what might be legible respecting their past lives, and their hopes of future happiness in the "far West," whither they were going to plant their habitation.

While viewing the motley group, which thronged this moving mansion house, my attention was suddenly arrested by an aged matron, whose countenance, sad and woe-worn as it was, plainly told me that she was a daughter of New England. A tear was in her eye as she cast on me a look, and reciprocated a "good morning." A little pleasant conversation passed between us, as the boat was just ready to start. As I was admonished by the busy preparation of all for the departure, that I had no time to lose, I hastily asked the question: What strange circumstance can have induced you, at this late period of your life, to forsake old home and friends, and to seek both anew in this western world? Under these circumstances she gave the following narrative of her life, interrupted only by an occasional sigh and the wiping away of the falling tear:

"My father was a respectable farmer, who settled in early life, in one of the most south-eastern counties of Vermont; where he died leaving but two children, myself and a brother. I married young, and settled with my husband on the inheritance of my father. Happiness smiled upon us almost without interruption for 21 years. We were blessed with a son, an only child; who was kind and affectionate; who pursued the labors of the farm under his father's direction, and appeared as contented and happy as though the world extended not beyond the bounds of our little paradise.

"A severe fit of sickness confined him to his bed, for several months; when convalescing he visited a relative of ours, who was extensively engaged in trade in an adjoining town. He assisted this friend in his store, a few months, and then returned to us in good health. But alas, for *his* peace and *ours!*—The *trade mania* had seized him. Our beautiful farm, the stock of which had been so much his care and delight, from his childhood, and our peaceful quiet home, had no longer any charms for him. He was ready to forsake all, and even besought his father to give him the portion of goods that fell to him, that he might take his journey to a distant state. This was a severe blow to our long cherished hopes, and we were about to be deprived of the society of our only son, the comfort and support of our declining years; and the thought, that we should have no child to close our eyes, and lay us in the resting place of our fathers, was most painful and overwhelming.

"But after many months of painful solicitude and suspense, one half of our farm was deeded to William, with the agreement that he should abandon forever his project of trade, and pursue, as before, the labors of the farm in connection with his father. Several years passed pleasantly away, with little to disturb our peace except additional expenses, on William's part, of fine coats, morocco boots, fine linen collars and other expensive clothing, besides a $50 watch, a fine horse, and considerable spending money. Still these things did not trouble us much. Having but one son, and expecting him to inherit all our possessions, when we were gone; we loved to see him appear as well at meeting as any of our neighbors' sons. His father chose that he should have the best horse in town. As his constitution was not very good, frequent relaxation seemed necessary for his health, and he was often engaged in purchasing, selling and exchanging stock to improve and increase our own; while his father took upon himself the management and labors of the farm, which afforded an abundance of every thing that we needed to make us comfortable and happy.

"But we were not permitted to enjoy long this state of fancied peace and security. The *trade mania* was not eradicated, but grew with his growth, and strengthened with his strength. William again became discontented; he could not endure the labors of the farm; his health began to decline; his business was neglected; and trade, trade, trade, was the only employment he could think of enduring. He mortgaged his half of the farm, purchased a stock of goods, and commenced the retailing business in our town;—his credit must be sustained at a neighboring Bank, and his father became his endorser. In four years, W.'s half of the farm was sold by the sheriff; and in two years more all the other half, except a few acres on which our house and other buildings stood. This little homestead we still held, and were again free from debt.

"William forsook his native state, and located himself in the far west. Our years are rapidly declining, we feel the infirmities of age, our little home stead will not support us, and we are following him. His society is indispensable to our happiness—we cannot live without him.

"Painful indeed was the struggle—to be compelled to sell my father's inheritance; to bid adieu forever to the home of my childhood and all the pleasant scenes of my early life, the endearing associations of a much loved Christian church, no more to be permitted to enter within the sacred walls

"Where
My soul first drew the vital air;"

no more to behold our aged minister, under whose preaching, the light of heavenly truth first beamed upon my soul; to abandon the sepulchre of my father and my mother, and the hope long cherished, that I should rest beside them; the domestic circle and the family altar, around which, for 30 years, we bowed and worshipped as an unbroken family; to leave, though least of all, yet dear to my heart, the armed rocking chair, in which I lulled my William to sleep in his infancy; to break asunder at once the thousand nameless ties that bind the heart to the home and spot loved most, caused many tears and prayers before we could yield to the pressing solicitations of our son, and cast the last lingering look on the dwelling place of our fathers, and seek a new home, and find a lonely grave in the wilderness of the west.

"O, could I but reasonably cherish the hope, that after a few years of exile, we should be permitted to return, and that we might finally rest in the grave yard by the side of our fathers and our mothers, I should be fully resigned to the Providence that separates us from their ashes.

"But we will not repine at the dealings of Providence. We have greatly erred in neglecting the early education of our son; in indulging him in habits of ease, indolence and extravagance; and what is the worst and the root of all the evil, which has befallen him and us, was the foolish and contemptible notion, that the business which we were called to follow, was not only laborious but servile; that a farmer, though rich, could not be a gentleman, or occupy any very respectable station in life. Forgetting that

"'Tis education forms the common mind,
Just as the twig is bent, the tree's inclin'd."

"Our error has proved the ruin and disgrace of our family; exiled us from our home in old age; compelled us to seek a resting place from the scorn and contempt of the more wise and prudent, in a far distant retreat, among strangers, and with nothing to cheer our declining life, but the society of our son and the hope of heaven."

The last signal was given for the boat's departure; the big tear that stood in her eye, as I hastily shook her withered hand, rolled down her pale and furrowed cheek, others followed in rapid succession, and the last glimpse I caught of her wasted form, as the boat moved rapidly and majestically along, she was wiping them away.

The scene to me was an affecting and instructive one; and I retired from the bustle and confusion of the city with renewed desire for the employments of rural life, thankful that Providence had assigned, to me in trust, a little green spot of earth to dress and keep; and with Burns I said:

"Many and sharp the numerous ills,
Inwoven with our frame;
More pointed still we make, ourselves,
Remorse, regret, and shame."

Buffalo. OBVIOUS.

DEATH OF A CHILD OCCASIONED BY A CAT.—A friend intimately acquainted with the facts, and whose statement may be relied on, informs us that a few days since an infant only six months old was killed by a cat having sucked its blood from the nose of the child while asleep in the cradle. The child was found with the blood to its nose, warm, but lifeless. The cat remained in the cradle with its mouth and nose immersed in blood, and so gorged as to be unable to leave the place. A medical examination took place, and the result was from the loss of blood by the child, and a great quantity found in the cat, which was killed, that the life of the child was taken by the cat.—*Dai. Adv.*

☞ We understand that Secretary Cass has ordered the troops to evacuate Fort Niagara, and proceed to Fort Gratiot. They will leave this week.—*Lockport Balance.*